

CLAIMS

What is claimed is:

- 1 1. A method of generating a user interface, the method comprising the steps
2 of:
3 receiving a television signal;
4 displaying images on a display device based on the television signal;
5 determining whether secondary information associated with the
6 television signal is available; and
7 if secondary information associated with the television signal is
8 available, displaying a notification on the display device as the images are
9 being displayed.
- 1 2. A method according to claim 1, wherein the secondary information
2 associated with the television signal comprises data for generating an
3 interactive user interface.
- 1 3. A method according to claim 2, wherein the secondary information
2 comprises hypertext data associated with the television signal.
- 1 4. A method according to claim 3, wherein the hypertext data represents data
2 retrieved on a wide area network.
- 1 5. A method according to claim 3, wherein the step of displaying a
2 notification comprises the step of displaying an animated character.

5 client processing system, cause the client processing system to perform the
6 method recited in claim 8.

1 16. A processing system for connection to a television set, the television set
2 having a display device, the processing system comprising:
3 a processor;
4 a receiver coupled to the processor for receiving a television signal; and
5 a memory coupled to the processor, the memory having stored therein
6 sequences of instructions for configuring the processor to:
7 cause video images on the display device based on the television
8 signal;
9 detect a predetermined event; and
10 display an animated character on the display device in response
11 to detecting the predetermined event as the video images are being displayed.

1 17. A processing system according to claim 16, wherein the event comprises a
2 user-specified event.

1 18. A processing system according to claim 16, wherein the event comprises
2 an end of a television advertisement.

1 19. A processing system according to claim 16, wherein the event comprises
2 the availability of secondary information associated with the television
3 signal, wherein the secondary information includes hypertext data associated
4 with a current content of the television signal.

- 1 20. A processing system according to claim 19, wherein the predetermined
2 content comprises data for generating an interactive user interface.
- 1 21. A processing system according to claim 19, wherein the predetermined
2 content comprises hypertext data corresponding to data originating from a
3 computer network.
- 1 22. A processing system according to claim 21, wherein the hypertext data
2 comprises data representing a World Wide Web page.
- 1 23. A method of generating a user interface in a processing system
2 connectable to a display device, the method comprising the steps of:
3 displaying an input window on the display device, the input window
4 including a plurality of icons located substantially adjacent to each other
5 along a coordinate axis;
6 in response to a user input selecting one of the icons:
7 redisplaying the input window, such that at least one of the
8 icons appears to be shifted in position along the coordinate axis; and
9 displaying information corresponding to the selected icon
10 adjacent to the selected icon along the coordinate axis.
- 1 24. A method according to claim 23, wherein all of the plurality of icons
2 remain visible during the step of displaying information corresponding to the
3 selected icon.

1 33. A method according to claim 32, wherein the video images include real-
2 time television images.

34. A method according to claim 33, further comprising the step of receiving
hypertext data transmitted from a remote processing system.

35. A method according to claim 31, further comprising the step of receiving
a user input selecting one of the icons, the user input having been entered by
a user from a remote input device.

36. A method of enabling a client processing system to generate a user interface, the method comprising the step of transmitting sequences of instructions from a host processing system to the client processing system, the sequences of instructions including instructions which, when executed on the client processing system, cause the client processing system to perform the method recited in claim 31.

37. In a first processing system connected to communicate with a second,
remote processing system, a method of displaying information describing a
state of communication of data between the first and second processing
systems, the method comprising the steps of:

5 displaying an object on a display device, the object having a first
6 portion and a second portion;

causing a visually perceivable change to the first portion of the object to indicate that a communication link has been established between the first and second processing systems; and

causing a visually perceivable change to the second portion of the object to indicate a degree of completeness of a communication between the first and second processing systems.

38. In a first processing system connected to communicate with a second processing system over a network, a method of displaying information about a download from the second processing system to the first processing system, the method comprising the steps of:

displaying a substantially circular object on a display device, the object having a substantially circular section, the object further having a substantially ring-shaped periphery section enclosing the substantially circular section;

displaying a color band which moves about the periphery section to indicate that communication has been established between the first and second processing systems; and

progressively filling in the substantially circular section with a color to indicate a degree of completeness of the download.

39. A method of generating a user interface in a processing system connectable to a display device, the method comprising the steps of:

displaying a first window on the display device; and

4 displaying a second window on the display device such that the first
5 and second windows appear to move along a common axis.

1 40. A method according to claim 39, wherein the step of displaying the second
2 window on the display device comprises the step of displaying the second
3 window on the display device to create a visual effect of the first window
4 being pushed aside by the second window.

1 41. A method according to claim 40, wherein the display device comprises a
2 television set, and wherein the method is implemented in a set-top box for
3 enabling a user to access a wide area network using the television set as the
4 display device.

1 42. A method according to claim 39, wherein the first and second windows
2 are input windows.

1 43. A method according to claim 39, wherein the step of displaying the second
2 window on the display device is in response to a user input.

1 44. A method of generating a user interface in a processing system
2 connectable to a television set, the processing system for enabling a user to
3 access a wide area computer network using the television set as a display
4 device, the television set having a display area, the method comprising the
5 steps of:

6 displaying an input field in a first portion of the display area of the
7 television set, the input field for allowing the user to enter characters to
8 specify a function of the processing system which the user wishes to access;
9 and
10 displaying a menu in a second portion of the display area while
11 displaying the input field, the menu specifying functions of the processing
12 system.

1 45. A method according to claim 44, wherein the input field is further for
2 allowing a user to enter characters corresponding to an address on the wide
3 area computer network, the address for causing the processing system to
4 communication with a remote processing system corresponding to the
5 address.

1 46. A method according to claim 45, wherein the input field is further for
2 allowing a user to enter characters specifying a hypertext link.